

REMARKS

Reconsideration and allowance of the present application based on the following remarks is respectfully requested.

Claims 3-13 are pending in the application.

Restriction to claims 1-2 or claims 3-9 was requested by the Examiner. In a telephone conversation on July 19, 2000, applicant's representative made a provisional election with traverse to prosecute the invention of claims 3-9. Applicant affirms this election. Claims 1-2 are cancelled.

Claims 3-4 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Taylor (USPN 4,474,830) and/or Japan 09241042. Applicant submits that the amendment to claim 3 obviates the rejection.

Claim 3 has been amended to incorporate one of the numerical constraints of claim 5, which was indicated by the Examiner to be allowable. Neither Taylor nor Japan 09241042 teaches or suggests that $0.05G < H < .5G$, as recited in amended claim 3. As noted in the specification on pp. 22-23, this dimension range for the protrusion can provide suppression of outside diameter fluctuation of the coating.

Claim 4 depends from claim 3, and therefore also incorporates the numerical constraint incorporated into newly amended claim 3, again not part of the invention of either Taylor or Japan 09241042, or obvious to someone skilled in the art.

Applicant submits that claims 3-4 are now in condition for allowance, and respectfully requests that the Examiner withdraw the rejection and grant allowance.

Claims 5-9 have been objected to as being dependent upon a rejected base claim, but the Examiner has indicated claims 5-9 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 5 has been rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant submits that claim 5 is now in allowable form.

Claim 6 depends from the newly amended claim 3, and is also now in allowable form.

Claims 7-9 depend from claim 6, and is now in allowable form.

Applicant submits that claims 5-9 are now all in allowable form, and respectfully requests that the Examiner withdraw her objection and grant allowance.

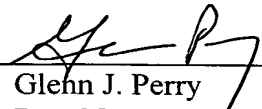
In view of the foregoing, the claims are now believed to be in form for allowance, and such action is hereby solicited. If any points remain in issue which the Examiner feels may be

best resolved through a personal or telephone interview, she is kindly requested to contact the undersigned at the telephone number listed below.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached Appendix is captioned **"Version with markings to show changes made"**.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,
PILLSBURY WINTHROP LLP

By: 
Glenn J. Perry
Reg. No.: 28,458
Tel. No.: (703) 905-2161
Fax No.: (703) 905-2500

GJP/TPT/smm
1600 Tysons Boulevard
McLean, VA 22102
(703) 905-2000
Enclosure: Appendix

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please amend the claims as follows:

3. (Amended) An optical fiber coating apparatus for applying first and second coating resins as a laminate to the outer periphery of an optical fiber, said apparatus comprising:

a first coating die having a first die hole through which said optical fiber is inserted and a basically disk-shaped lower end face with a protrusion projecting in the passing direction of said optical fiber and formed around said first die hole, said first die hole and the outer periphery of said optical fiber therein forming a space therebetween into which said first coating resin is injected; and

a second coating die having a second die hole which is concentric with said first die hole and through which said optical fiber passed through said first die hole is inserted and an upper end face comprising a circular plate opposing the lower end face of said first coating die so as to form a gap through which said second coating resin is injected into a space formed between said second die hole and the outer periphery of said optical fiber therein;

said protrusion being formed so as to reduce an annular lower-pressure region formed around said optical fiber in a flow of said second coating resin within said gap; and wherein said apparatus satisfies:

$$\underline{0.05G < H < 0.5G}$$

wherein H is the height of said protrusion, and G is the distance of the gap between said first and second coating dies.

5. (Amended) An optical fiber coating apparatus for applying first and second coating resins as a laminate to the outer periphery of an optical fiber, [according to claim 4] said apparatus comprising:

a first coating die having a first die hole through which said optical fiber is inserted and a basically disk-shaped lower end face with a protrusion projecting in the passing

direction of said optical fiber and formed around said first die hole, said first die hole and the outer periphery of said optical fiber therein forming a space therebetween into which said first coating resin is injected; and

a second coating die having a second die hole which is concentric with said first die hole and through which said optical fiber passed through said first die hole is inserted and an upper end face comprising a circular plate opposing the lower end face of said first coating die so as to form a gap through which said second coating resin is injected into a space formed between said second die hole and the outer periphery of said optical fiber therein;

said protrusion being formed so as to reduce an annular lower-pressure region formed around said optical fiber in a flow of said second coating resin within said gap, and said protrusion is shaped like a circular truncated cone, wherein said apparatus satisfies:

$$0.05G < H < 0.5G$$

$$(D_2 - D_1)/2 < W < G$$

$$0.01 \text{ mm} \leq L < W$$

where H is the height of the circular truncated cone of said protrusion, W is the distance between the outer periphery of the bottom portion of said circular truncated cone and the inner peripheral face of said first die hole, L is the distance between the outer periphery of the head portion of said circular truncated cone and the inner peripheral face of said first die hole, D_1 is the inner peripheral face diameter of said first die hole on the outlet side of said optical fiber, D_2 is the inner peripheral face diameter of said second die hole on the inlet side of said optical fiber, and G is the distance of the gap between said first and second coating dies.